



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/037,031

01/02/2002

Demetrios Stamatelakis

LAMA118471

6486

26389

7590

02/06/2006

CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC
1420 FIFTH AVENUE
SUITE 2800
SEATTLE, WA 98101-2347

EXAMINER

NGUYEN, STEVEN H D

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/037,031

Applicant(s)

STAMATELAKIS ET AL.

Examiner

Steven HD Nguyen

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-27, 31, 35 and 39-45 is/are rejected.
- 7) ☒ Claim(s) 28-30, 32-34 and 36-38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/02, 4/02.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 21 is rejected under 35 U.S.C. 102(e) as being anticipated by Venkatesan (USP 5999286).

Regarding claim 21, Venkatesan discloses a method of operating a telecommunications network in which the telecommunications network (Fig 7) includes plural distinct nodes (Fig 7, Ref S, D, T1-T4) interconnected by plural distinct spans (Fig 7, Spans between the nodes, See Fig 1), each node having a digital cross-connect switch (Col. 1, lines 15-27) for making and breaking connections between links in adjacent spans forming span paths through the node, the method comprising the steps of selecting an originating node (Fig 7, Ref S is selected as source node after identifying a failure on the link 100); initiating an automatic search from the originating node to identify a set of successive intermediate nodes that, together with the originating node, may form a closed path having at least one spare link between each pair of adjacent nodes in the closed path (Fig 7, the S will generate the path search messages for transmitting to adjacent nodes which forwards this messages to a node D in order to form a closed path between S and D, See col. 6, lines 57-66, Fig 16, Paths S-T2-T3-D and S-T1-T4-D is closed path between the nodes S and D); and b) forming a cross-connection at each node in the

Art Unit: 2665

closed path to connect spare links in each of the adjacent spans lying in the closed path and thus form a span path through each node in the closed path (Fig 16, S sends the connection message along the paths to form a cross connection at the nodes T1-T4, See col. 9, lines 28-40);

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 22-25 and 39-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Venkatesan in view of Grover (USP 4956835).

Regarding claim 22, Venakatesan discloses the successive nodes are not capable of forming a closed path that does not include the originating node and each statelet is prevented from being broadcast along the span on which the statelet arrived at the intermediate node (Col. 7, lines 10-20) excepting for broadcasting statelets from successive nodes in the network along successive spans having at least one spare link in each span at least until a first statelet is broadcast to the originating node. In the same field of endeavor, Grover discloses broadcasting statelets from successive nodes in the network along successive spans having at least one spare link in each span at least until a first statelet is broadcast to the originating node (Col. 10, lines 60-63, the sender replaces the failed path with a new path after receiving a complement signature at the sender and suspends the original signature broadcasts).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for stopping transmitting the original signature message after receiving a complement signature message at the sender as disclosed by Grover into the teaching of Venakatesan. The motivation would have been to prevent the system falling into a infinite state of restoration.

Regarding claim 23, Venakatesan discloses initiating a broadcast from an originating node by broadcasting an originating statelet; and receiving incoming statelets at intermediate nodes, and broadcasting at least one statelet received by each intermediate node to one or more nodes adjacent to the intermediate node and connected to the intermediate node by at least one spare link (Figs 7-16).

Regarding claim 24, Venakatesan discloses only one statelet derived from the same originating statelet is broadcast, at any intermediate node, on any one span (Figs 8-9 discloses only message is broadcasted from the original message at T4 node).

Regarding claim 25, Venakatesan discloses each statelet is broadcast to the maximum extent possible at each successive node (Fig 8, each message is broadcasted based on the hop count filed in the message).

Regarding claims 39-40, 42-43 and 45, Venakatesan fails to disclose a step of repeating the step a1, a2 and b for each of originating nodes in the network; periodically repeating steps a2 and b at a node. However, the examiner takes an official noticed that a step for repeating a sequence of steps or repeating the steps according a timer to establish a path between each of source node to each destination node is well known and expected in the art at the time of

Art Unit: 2665

invention was made to provide the alternate paths between the source and destination node in order to improve the restoration process in the telecommunication network.

Regarding claims 41 and 44, Venakatesan discloses a node is carried out after a change of the configuration of working links in the network (Fig 7-16, a node searching and establishing a new path after receiving a failure signal on a link).

5. Claims 26-27, 31 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Venakatesan and Grover as applied to claim 21 above, and further in view of Nishimura (USP 5235599).

Regarding claim 26, Venakatesan and Grover fail to disclose a statelet broadcast through the network is modified at each intermediate node to update a route field in the statelet that records the successive nodes by which the statelet has been broadcast. In the same field of endeavor, Nishimura discloses a statelet broadcast through the network is modified at each intermediate node to update a route field in the statelet that records the successive nodes by which the statelet has been broadcast (Fig 2, node trace field is updated before forwarding by a node).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for updating node trace field of the control message before forwarding the modified signature message to downstream node as disclosed by Nishimura into the teaching of Venakatesan and Grover. The motivation would have been to provide a path for transmitting a return message from destination to source.

Art Unit: 2665

Regarding claim 27, Nishimura discloses incoming statelets at an intermediate node are broadcast preferentially according to an ordering of the incoming Statelets (Fig 11, the control packet is broadcasted according the order that they received C1-C2 and C13-C14).

Regarding claims 31 and 35, Venakatesan discloses a closed path is formed by making cross connections between successive spans in one of several routes followed by incoming statelets received by an originating node (Figs 14-16, S sends the connection message to make a cross connection at the nodes in order to form a closed path between S and D after receiving a returned message at the source).

Allowable Subject Matter

6. Claims 28-30, 32-34 and 36-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2665

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'SHN', is written over the printed name of the examiner.

Steven HD Nguyen
Primary Examiner
Art Unit 2665
January 30, 2006